SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Harold Runnels Building, N2050
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, NM 87502-5469
Phone (505) 827-0187 Fax (505) 827-0160
www.env.nm.gov

BUTCH TONGATE
Acting Cabinet Secretary

JUAN CARLOS BORREGO
Acting Deputy Secretary

Certified Mail - Return Receipt Requested

September 6, 2016

Mr. Efren Yturralde, Superintendent
Gadsden Independent School District # 16
Gadsden Administrative Complex
P.O. Drawer 70
Anthony, New Mexico 88021

Re: Gadsden Independent School District; Minor Non-Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; NM0028487; May 12, 2016

Dear Mr. Yturralde:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the "Further Explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Sarah Holcomb
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Barbara Cooney at (505) 827-0212 or at barbara.cooney@state.nm.us.

Sincerely,

/S/ Sarah Holcomb

Sarah Holcomb
Acting Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Racquel Douglas, USEPA (6EN-WM) by e-mail
Brent Larsen, USEPA (6WQ-PP) by e-mail
Gladys Gooden- Jackson, USEPA (6EN-WC) by e- mail
NMED District 3, Michael Kesler by e-mail

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

1	Transaction Code	2	3	NPDES	11	12	yr/mo/day	17	18	Inspec. Type	19	Inspector	20	Fac Type
	N	5	N	MN0028487			160512			C		S		2

Remarks: GADSDEN SCHOOL MINOR NONMUNIC

67	Inspection Work Days	69	70	Facility Evaluation Rating	71	BI	72	QA	73	Reserved	74	75		80
	1			3		N		N					MINOR	

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Gadsden Independent School District #16,
P.O. Drawer 70
Middle School,
1301 W. Washington
and
High School, 6301 Highway 28 Drive,
Anthony, NM 88021
Doña Ana County

Entry Time /Date May 12, 2016
Hours / 10:30 Hours

Exit Time/Date May 12, 2016
Hours / 13:15 Hours

Permit Effective Date
May 1, 2014

Permit Expiration Date
April 30, 2019

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Mr. Alfredo Hoguin / Gadsden ISD, Physical Plant Director/575-882-6200
Mr. Mario Apadoca / Gadsden ISD, WWTP Operator/575-621-5839

Other Facility Data

LAT 31° 59' 56.03"
LONG – 106° 38' 6.52"
SIC 4952

Name, Address of Responsible Official/Title/Phone and Fax Number
Mr. Efren Yturralde, Superintendent
Gadsden Administrative Complex, P.O. Drawer 70, Anthony, NM 88021/
Superintendent / 575-882-6203 or 882-6200

Contacted
Yes [ ] No [X]

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
M	Records/Reports	S	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

1. SEE REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
/S/ Barbara Cooney	NMED/SWQB 505-827-0212 / 505-827-0160	*9-2-2016*
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date** *9-2-2016*
/S/ Jennifer Foote	505-827-0187 / 505-827-0160	

Gadsden Independent School District WWTP	PERMIT NO. NM0028487

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED NO)*

DETAILS:

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	☒ Y ☐ N ☐ NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES	☒ Y ☐ N ☐ NA
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT	☒ Y ☐ N ☐ NA
4. ALL DISCHARGES ARE PERMITTED	☒ Y ☐ N ☐ NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED YES)*

DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.	☒ Y ☐ N ☐ NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.	☒ S ☐ M ☐ U ☐ NA
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING	☒ Y ☐ N ☐ NA
b) NAME OF INDIVIDUAL PERFORMING SAMPLING	☒ Y ☐ N ☐ NA
c) ANALYTICAL METHODS AND TECHNIQUES.	☒ Y ☐ N ☐ NA
d) RESULTS OF ANALYSES AND CALIBRATIONS.	☒ Y ☐ N ☐ NA
e) DATES AND TIMES OF ANALYSES.	☒ Y ☐ N ☐ NA
f) NAME OF PERSON(S) PERFORMING ANALYSES.	☒ Y ☐ N ☐ NA
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.	☒ S ☐ M ☐ U ☐ NA
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.	☒ S ☐ M ☐ U ☐ NA
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.	☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. ☐ S ☒ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED YES)*

DETAILS:

1. TREATMENT UNITS PROPERLY OPERATED. Solids are overloaded at both treatment plants more wasting is necessary		☐ S ☒ M ☐U ☐ NA
2. TREATMENT UNITS PROPERLY MAINTAINED.		☐ S ☒ M ☐ U ☐ NA
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.		☒ S ☐ M ☐ U ☐ NA
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.		☒ S ☐ M ☐ U ☐ NA
5. ALL NEEDED TREATMENT UNITS IN SERVICE.		☒ S ☐ M ☐ U ☐ NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.		☒ S ☐ M ☐ U ☐ NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.	Not Evaluated	☐ S ☐ M ☐ U ☒ NA
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.		☒ Y ☐ N ☐ NA
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.		☒ Y ☐ N ☐ NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.		☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?	☐ Y ☒ N ☐ NA
IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?	☐ Y ☒ N ☐ NA
HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?	☐ Y ☒ N ☐ NA
10.HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?	☐ Y ☒ N ☐ NA
IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?	☐ Y ☐ N ☒ NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED NO__).*
DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	☒ Y ☐ N ☐ NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.	☒ Y ☐ N ☐ NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE	☒ Y ☐ N ☐ NA
a) SAMPLES REFRIGERATED DURING COMPOSITING.	☒ Y ☐ N ☐ NA
b) PROPER PRESERVATION TECHNIQUES USED.	☒ Y ☐ N ☐ NA
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.	☒ Y ☐ N ☐ NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?	☐ Y ☐ N ☒ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED YES)*
DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE	☒ Y ☐ N ☐ NA
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.	☒ Y ☐ N ☐ NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.	☐ Y ☒ N ☐ NA
4. CALIBRATION FREQUENCY ADEQUATE. *(DATE OF LAST CALIBRATION* November 2, 2015)	☒ Y ☐ N ☐ NA
RECORDS MAINTAINED OF CALIBRATION PROCEDURES.	☐ Y ☒ N ☐ NA
CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.	☐ Y ☒ N ☐ NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.	☐ Y ☐ N ☒ NA
6. HEAD MEASURED AT PROPER LOCATION.	☒ Y ☐ N ☐ NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.	☒ Y ☐ N ☐ NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED YES)*
DETAILS:

1. EPA APPROVED ANALYTICAL PROCEDURES USED *(40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)*	☐ Y ☒ N ☐ NA

Gadsden Independent School District WWTP

PERMIT NO. NM0028487

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED ☐ Y ☒ N ☐ NA

3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☒ S ☐ M ☐ U ☐ NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. ☒ S ☐ M ☐ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. 10 % OF THE TIME. ☒ Y ☐ N ☐ NA

6. SPIKED SAMPLES ARE ANALYZED. 10 % OF THE TIME. ☐ Y ☒ N ☐ NA

7. COMMERCIAL LABORATORY USED. ☒ Y ☐ N ☐ NA

LAB NAME Water Technology Associates

LAB ADDRESS 3400 S. Espina, Las Cruces

PARAMETERS PERFORMED BOD, TSS, pH, e Coli

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED ___).*

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	NO	NO	Slight	NO	NO	Clear	
01A (internal)	NO	NO	Yes	NO	NO	CLEAR	
01B (internal)	NO	NO	Yes	NO	NO	CLEAR	

RECEIVING WATER OBSERVATIONS

See Further Explanations.

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED NO).*

DETAILS:

Solids removed by liquid waste hauler and disposed of at the South Central Regional WWTP

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. ☐ S ☐ M ☐ U ☒ NA

2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. ☐ S ☐ M ☐ U ☒ NA

3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: _____ (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES *(FURTHER EXPLANATION ATTACHED NO).*

1. SAMPLES OBTAINED THIS INSPECTION. ☐ Y ☒ N ☐ NA

2. TYPE OF SAMPLE OBTAINED

GRAB _____ COMPOSITE SAMPLE ___ METHOD _____ FREQUENCY

3. SAMPLES PRESERVED. ☐ Y ☐ N ☒ NA

4. FLOW PROPORTIONED SAMPLES OBTAINED. ☐ Y ☐ N ☒ NA

5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. ☐ Y ☐ N ☒ NA

6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE. ☐ Y ☐ N ☒ NA

7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ☒ NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ☒ NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ☒ NA

Introduction

On May 12, 2016, Barbara Cooney of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Gadsden Independent School District (ISD) # 16 Wastewater Treatment Plant (WWTP). The Gadsden ISD facility, consisting of two separate treatment plants with one at the High School and one at the Middle School, has a design flow capacity of 0.09 MGD (million gallons per day) and is classified as a minor non municipal discharger under the federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0028487 which regulates discharge of wastewater from Outfall 001 to the Rio Grande (Segment 20.6.4.101 State of New Mexico Standards for Interstate and Intrastate Surface Waters, New Mexico Administrative Code (NMAC)). This segment includes the designated uses of irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representatives, observations made by the NMED inspector, and records and reports kept by the permittee and/or NMED.

Upon arrival at the WWTP at10:20 hours , the inspector met with Mr. Alfredo Hoguin - Gadsden ISD, Physical Plant Director and Mr. Mario Apodaca - WWTP Operator , showed her credentials, explained the purpose of the inspection. Mr. Apodaca accompanied the inspector on a tour of the facility. A review and the laboratory commenced thereafter. Records were copied and provided to the inspector by the permittee for a records review. Following an exit interview with Mr. Apodaca, the inspector left the facility at 13:30 hours.

Treatment Scheme

Middle School

The Middle School Waste Water Treatment Plant (WWTP), was constructed in the 1970's, Work completed in December of 2009 at this plant included refurbishing the main lift station with submersible pumps, relining (re-coating) basins, and upgrading and replacing aeration pipes and diffusers.

Raw wastewater from the Middle School (approximately 1,000 students and faculty), cafeteria, supporting ISD buildings, on-site caretaker residence, and vehicle maintenance shop floor drains all drain to the WWTP. The influent enters the plant via a lift station east of the aeration basin. Both the Middle School cafeteria and ISD physical plant vehicle wash bays have grease traps before the lift station. The lift station is located in a covered building which pumps wastewater from a wet well to the aeration basin. A light alarm at the lift station is visible from the on-site caretaker residence.

Lifted wastewater enters the treatment plant through a fine screen. Screenings are placed in a hopper and allowed to dry for final disposal at a municipal solid waste landfill in Sunland Park, New Mexico. After being screened, the wastewater enters a rectangular, baffled aeration basin. Following the aeration basin is a secondary clarifier. Return Activated Sludge (RAS) from the clarifier is pumped back to the head of the aeration basin. Two blowers are used for the aeration basin and provide the lift necessary to move the RAS back to the head.

Floating material is removed manually from the clarifier. Flow leaving the clarifier then enters a basin that previously was used as a chlorine contact chamber. It is no longer used for chlorine disinfection since a new inline Ultraviolet (UV) disinfection system by Enaqua was installed.

The middle school has an inline 60 degrees V notched weir with a rectangular weir box with an ultrasonic flow meter past the secondary clarifier and before it enters the enclosed pipe that carry the water to the holding tank where it mixes with the high school treated water before disinfection. The combined flow passes through the UV disinfection system. The combined disinfected wastewater is again measured for volume and travels through an enclosed pipe via gravity to the discharge at the Rio Grande, Outfall 001.

High School
The High School WWTP was constructed in 1993. The design flow is 55,000 gallons per day. The collection system includes 3 lift stations with alarm lights. Raw wastewater from the High School (approximately 2,070 students and faculty), cafeteria, vehicle shop, biology lab, chemical lab, and an on-site caretaker residence enters the plant via a lift station and passes through a static screen for solids removal. Similar to the Middle School WWTP, screenings are placed in hoppers and allowed to dry for final disposal at municipal solid waste landfill in Sunland Park, New Mexico.

Wastewater then enters an aeration basin. Two blowers supply the air. Additionally, the blowers provide lift for the Return Activated Sludge (RAS) that is continuously returned from the secondary clarifier back to the aeration basin. A backup diesel generator is located at the High School WWTP.

Following the aeration basin is a rectangular clarifier basin. Flow is measured after the clarifier using a V-notch weir and ultrasonic transducer device. The weir is located in an open channel box and the transducer is located upstream of the weir. An automatic ISCO 4210 Ultrasonic Flow Meter was mounted in the pump and blower control room and displayed instantaneous flow rate, time, totalized flow and head measurement.

Following flow measurement is another square basin where two Flygt pumps are located that lift the wastewater to a forced line and sends it to the middle school for disinfection. In this basin, operators have installed surface and bottom baffles to collect solids that may get through from the clarifier before they reach the Flygt pumps. This is Outfall 01B.

Once this flow reaches the middle school, it enters a holding tank and mixes with the effluent flow from the Middle School WWTP. The combined flow is disinfected, by the Enaqua UV system before discharging to the Rio Grande at Outfall 001.

The installation of the Enaqua UV disinfection system, holding tank and effluent flow meters for the combined flows of treated wastewater from both the middle school and the high school, have resulted in a reconfiguration of the plumbing scheme since this permit was issued.

Sampling locations:
There are three sampling locations for this permit, two internal and one final discharge point.
1. Outfall 01B -The high school sampling location was moved in the last year, in the past it was located prior to being sent to the middle school. Now it is located at the middle school before the flow enters the holding tank and mixing with the middle school treated wastewater. A sample port is located in the enclosed line.
2. Outfall 01A The middle school, sampling is located past the secondary clarifier of that facility, the enclosed pipe has a sample port before it enters the holding tank and mixes with the high school treated water.
3. Outfall 001 -Past the holding tank where the treated water is mixed from the two schools, is the UV disinfection unit. After passing through disinfection final sampling is done for the combined flows that are discharged at the river.

Effluent flow measurement:
1. Outfall 01B - The high school has an inline 60 degrees V notched weir with a rectangular weir box. An ultrasonic totalizing meter is in place following the square basin that used to be used for a chlorine contact chamber.
2. Outfall 01A - The middle school has an inline 60 degrees V notched weir with a rectangular weir box with an ultrasonic flow meter past the secondary clarifier and before it enters the enclosed pipe that carry the water to the holding tank where it mixes with the high school treated water before disinfection.
3. Outfall 001 - Final effluent flow measurement is located inline in the enclosed pipe, past the disinfection system for final discharge.

Solids Management

Biosolids produced at the treatment plants are pumped out of the clarifiers on and transported by a contracted septic tank and cesspool service to the Doña Ana County South Central Regional WWTF.

Further Explanations

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

Record Keeping and Reporting

Overall Rating For Record Keeping and Reporting (Marginal)

Permit Requirements For Record Keeping and Reporting

The permit requires, in Part III. C. MONITORING AND RECORDS

4. Records Content

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. The date(s) and time(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

The permit requires:

NPDES PERMIT NO. NM0028487 Page 1 of PART I

PART I – REQUIREMENTS FOR NPDES PERMITS

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. OUTFALL 001 - FINAL Effluent Limits – 0.09 MGD Design Flow

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated domestic wastewater from Outfall 001 to Rio Grande River in Segment 20.6.4.101 of the Rio Grande Basin. Such discharges shall be limited and monitored by the permittee and reported as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
POLLUTANT	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	6.6 s.u.	9.0 s.u.	1/week	Instantaneous Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
	lbs/day, unless noted		mg/l, unless noted (*1)				
POLLUTANT	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	***	***	***	Daily	Totaled from internal outfall flows
BOD_5	22.5	33.8	N/A	N/A	N/A	1/Month	Grab (*2)
TSS	22.5	33.8	N/A	N/A	N/A	1/Month	Grab (*2)
E. coli bacteria (*3)	$4.2x10^8$ cfu/day	N/A	126 cfu/100 ml	N/A	410 cfu/100 ml	1/Month	Grab
TRC	N/A	N/A	N/A	N/A	19 ug/l (*4)	1/week	Grab (*5)

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING 48-HR ACUTE NOEC FRESHWATER (*6)	30-DAY AVG	48-HR MINIMUM	MEASUREMENT FREQUENCY (*7)	SAMPLE TYPE
Daphnia pulex	Report	Report	Once/5 year	Grab
Pimephales promelas	Report	Report	Once/5 year	Grab

2. OUTFALLs 01A and 01B – Internal Outfalls

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated domestic wastewater from Outfalls 01A and 01B to Outfall 001. Such discharges shall be limited and monitored by the permittee and reported as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
	lbs/day, unless noted		mg/l, unless noted				
POLLUTANT	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	Report MGD	Report MGD	***	***	***	Daily	Continuous
BOD_5	N/A	N/A	30	45	N/A	1/Month	Grab
TSS	N/A	N/A	30	45	N/A	1/Month	Grab
BOD_5 % removal, minimum	≥85 (*1)	***	***	***	***	1/Month	Calculation
TSS % removal, minimum	≥85 (*1)	***	***	***	***	1/Month	Calculation

Footnotes:

*1 Percent removal is calculated using the following equation:
[average monthly influent concentration (mg/l) – average monthly effluent concentration (mg/l)] ÷[average monthly influent concentration (mg/l)] x 100.

Findings For Recordkeeping and Reporting:
1. Records were reviewed for the first quarter of 2016.

2. The permit requires testing for Total Residual Chlorine (TRC 1/week) and does not specify that if UV disinfection is used that the permittee does not have to test for this pollutant. Since the installation of the new UV disinfection system the permittee has discontinued sampling and analysis of TRC.

3. EPA will soon require all permittees to use the electronic reporting system NetDMR. Training and information about that reporting system may be found at:
https://netdmr.zendesk.com/home

Self-Monitoring
Overall Rating For Self Monitoring (Satisfactory)

Operations and Maintenance
Overall Rating For Operations and Maintenance (Marginal)

Permit Requirements for Operation and Maintenance
The permit requires in Part III. B.

> *3. PROPER OPERATION AND MAINTENANCE*
> *a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.*

Findings For Operation and Maintenance
The high school, secondary clarifier had a 10 foot sludge blanket. Based on the inspector's best professional judgement, this approximately 13 foot deep basin should be maintained with a sludge blanket of no more than 3 feet to operate most efficiently. Return Activated Sludge (RAS) is sent back to the aeration basin several times a day, though disposal of additional Waste Activated Sludge (WAS) is necessary.

The plant is designed with a programed RAS pump in the clarifier. The only means to waste solids is by vactor truck. Operators indicated solids are removed a few times a year. This solids removal frequency in not adequate to meet the permit requirements for percent removal of pollutants, BOD and TSS.

Floating solids were observed in the secondary clarifier of the high school WWTP. A baffle was installed in the basin where the Flygt pumps are located to prevent these floating solids from being sent to the UV disinfection treatment unit at the junior high school. Though some solids appeared to get past the baffles.

The junior high school secondary clarifier/old chlorine contact chamber also had some floating and bulking solids in the units. Baffles were in place to stop the solids from making through to the UV disinfection treatment units.

Flow Measurement
Overall Rating for Flow Measurement (Satisfactory)

Permit Requirements for Flow Measurement
The permit requires in Part III.

> *Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

Findings For Flow Measurement
Since the last inspection, an inline flow meter has been installed. This meter was calibrated November 2, 2015. There is no secondary or back up flow measurement to the inline meter for the final outfall 001.

Laboratory
Overall Rating For Laboratory (Satisfactory)

Permit Requirements For Laboratory
The perm requires in Part III. 5. Monitoring Procedures:

> *a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.*
> *b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.*
> *c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of measurements and shall maintain appropriate records of such activities.*

Findings For Laboratory:
The onsite laboratory is used to analyze Total Residual Chlorine (TRC) and pH. The facility now uses an ultraviolet disinfection system and no longer uses chlorine. . The permit does not allow an option for the permittee to discontinue sampling for TRC if it is not in use. The permittee may contact the EPA and request a minor permit modification .

A contract laboratory, Water Technology Associates, Douglas Roby processes samples for BOD, TSS, E.coli bacteria.

Effluent And Receiving Water

Overall Rating For Effluent And Receiving Water (Unsatisfactory)

Permit Requirements For Effluent And Receiving Water:
See section above for table:
A LIMITATIONS AND MONITORING REQUIREMENTS

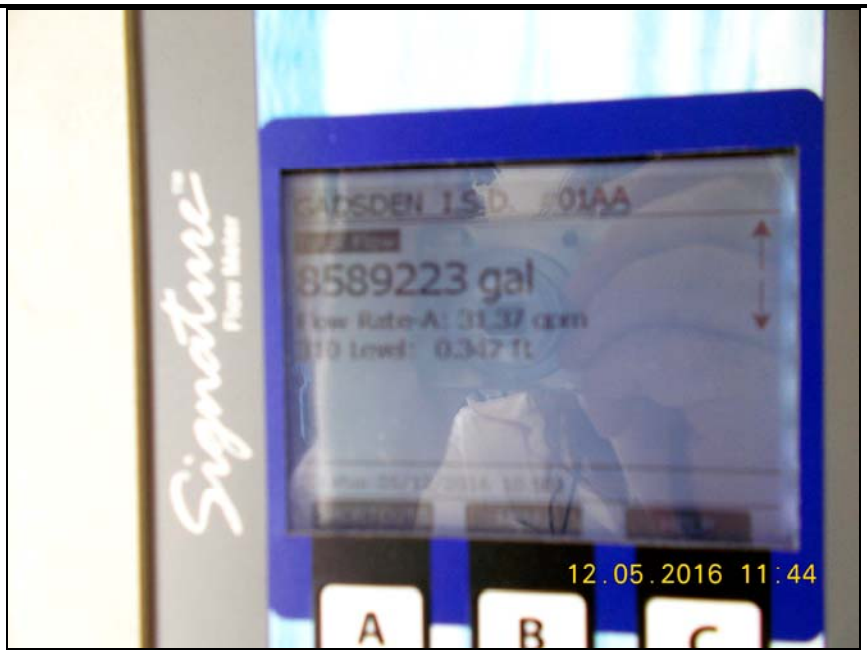
Findings For Effluent And Receiving Water:
See attached spreadsheet for effluent exceedences since the last inspection, September 2014:

SLUDGE HANDLING

Overall Rating For Sludge Handling (Not Evaluated)
This facility is not required to maintain sludge records because solids are sent to the Dona Ana County South Central WWTP for processing and final disposal.

MED/SWQB Official Photograph Log Photo # 1		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:43 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Gadsden Middle School – above ground aeration basin		

NMED/SWQB Official Photograph Log Photo # 2		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:44 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Influent Flow Meter gives a totalized flow as well as an instantaneous flow reading.		



NMED/SWQB Official Photograph Log Photo #3 &4		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:47 Hours & 11:45 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Influent screen removes large solids. These solids are sent down a chute as seen in photo # 4 and are deposited in a hopper for disposal at the landfill. The area was clean and free of debris.		

NMED/SWQB Official Photograph Log Photo #5		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:48 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Influent after screening is sent from this basin to the aeration basin.		

NMED/SWQB Official Photograph Log Photo # 6		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:48 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Aeration Basin during the anoxic and settling phase, there are bulking solids in the basin, indicating very old solids. According to the operator, solids are wasted two to three times per year. At the time of the inspection the Mixed Liquor Suspended Solids (MLSS) were unknown. The aeration phase is 3-4 hours and settling is 1-2 hours according to the operator.		

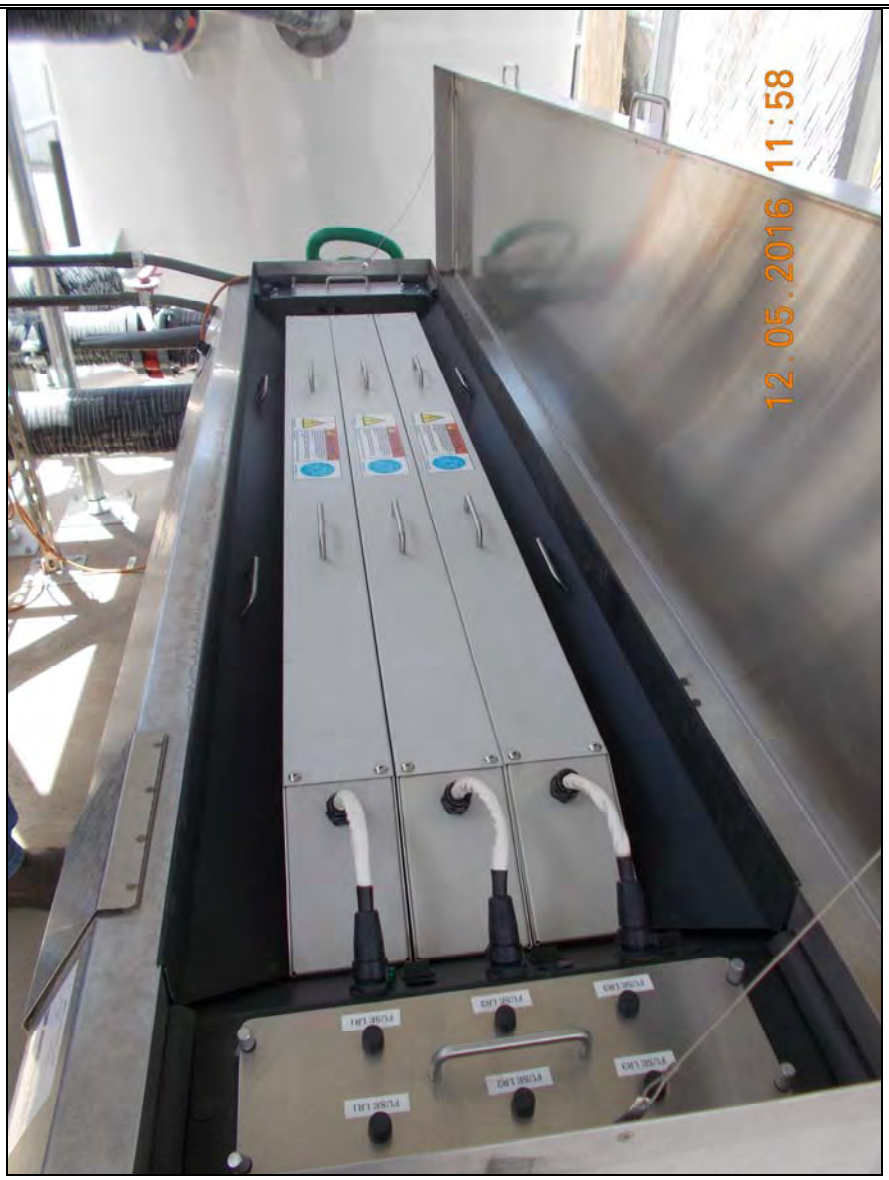
NMED/SWQB Official Photograph Log Photo # 7		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:51 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Secondary clarifier had bulking solids and some floating solids in the basin.		

NMED/SWQB Official Photograph Log Photo # 8		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:51 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Secondary clarifier weirs.		

NMED/SWQB Official Photograph Log Photo # 9		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:52 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: The old chlorine contact chamber is a solids settling and liquid pass through basin now. No chlorine is used at the facility now that a new Ultraviolet disinfection system is in place. Solids should be vactored out of the bottom of this basin as well as from the clarifier on occasion.		

NMED/SWQB Official Photograph Log Photo # 10		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:52 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Another view of the secondary Clarifier with floating solids. Surface baffles contain some but not all solids as the water passes through this unit.		

NMED/SWQB Official Photograph Log Photo # 11		
Photographer: B. Cooney	Date: May 12, 2015	Time: 11:58 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Enaqua brand - Ultraviolet inline disinfection treatment system.		



NMED/SWQB Official Photograph Log Photo # 12		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:04 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: Effluent sampling port following the final treatment unit, the Enaqua ultraviolet disinfection system. From this location the flow is sent to the outfall at the Rio Grande. Both the treated water from the junior high school and the high school pass through this system and are sampled following treatment.		

NMED/SWQB Official Photograph Log Photo # 13 & 14		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:07 Hours and 12:08 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: On site laboratory and operators office - Daily logs and sampling records are maintained and easily identified. Once logs have been completed they are placed in a well-organized file system. Operators were easily able to provide the inspector with requested records.		

NMED/SWQB Official Photograph Log Photo # 15		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:09
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Middle School Wastewater Treatment Plant		
Subject: pH buffers should have the date received and the date opened written on the bottles.		

NMED/SWQB Official Photograph Log Photo # 16		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:50 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden High School Wastewater Treatment Plant		
Subject: High school treatment plant and aeration basin in the air is well diffused throughout the basin.		

NMED/SWQB Official Photograph Log Photo # 17		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:28 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden High School Wastewater Treatment Plant		
Subject: The influent solids are removed by a screening system similar to that used at the junior high school and deposited in a wheelbarrow in a contained area before being disposed of at the landfill. The area was clean and free of debris.		

NMED/SWQB Official Photograph Log Photo # 18 & 19		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:39 Hours and 12:40 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden High School Wastewater Treatment Plant		
Subject: Solids in the secondary clarifier throughout the water column are an indication of inadequate wasting. Floating solids with grey appearance indicate old solids.		

NMED/SWQB Official Photograph Log Photo # 20		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:45 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden High School Wastewater Treatment Plant		
Subject: Secondary clarifier had a 10 foot sludge blanket with a few more feet of a diffuse layer above. Based on the inspector's best professional judgement, this approximately 13 foot deep basin should be maintained with a sludge blanket of no more than 3 feet to operate most efficiently. Return Activated Sludge (RAS) is sent back to the aeration basin several times a day, though disposal of additional Waste Activated Sludge (WAS) is necessary.		

NMED/SWQB Official Photograph Log Photo # 21		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:31 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden High School Wastewater Treatment Plant		
Subject: Two Flygt pumps lift the treated wastewater from the high school and send it through a forced main to the junior high school where disinfection is done with the same Enaqua system. Operators have installed a surface baffle to capture floating solids before they reach the pumps. The effluent following clarification is very turbid as can be seen in the photo below. This is an indication of incomplete solids removal and too much sludge in the clarifier.		

NMED/SWQB Official Photograph Log Photo # 22 & 23		
Photographer: B. Cooney	Date: May 12, 2015	Time: 12:59 Hours and 13:00 Hours
City/County: Anthony / Dona Ana		State: New Mexico
Location: Gadsden Independent School District Junior and High School combined WWTP outfall at the Rio Grande		
Subject: Final outfall for both the middle school and the high school at the Rio Grande		

Jessica S. Herrera
Director of Physical Plant

GADSDEN INDEPENDENT SCHOOL DISTRICT

PHYSICAL PLANT DEPARTMENT

P.O. DRAWER 70 /1325 W. WASHINGTON
ANTHONY, NM 88021
PHONE: (575)-882-6903 FAX: (575)-882-2508

September 27, 2016 CERTIFIED MAIL RETURN RECIEPT REQUESTED

Racquel Douglas
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Gadsden Independent School District; Minor Non-Municipal; SIC 4952: NPDES Compliance Evaluation Inspection; May 12, 2016

Dear Ms. Douglas,
Below please find our response to the attached letter dated September 6, 2016 from Sarah Holcomb, Acting Program Manager at the Surface Water Quality Bureau:

1.) Marginal rating: Records and reports maintained as required by permit details:
   - Sampling and measurements are documented by the district as required. A "Chain of Custody" form for all samples is submitted to the testing laboratory. This form contains the following information: Date, exact place and time of sampling/measurement, the individual who performed the sampling.
   - The testing laboratory then documents the following on the form: Date and time analysis performed, individual who performed the analysis, the analytical techniques or methodologies used, and the results of the analysis.
   - All forms are retained in multiple form and submitted with DMR's.

2.) Marginal rating: Operations and Maintenance
   - *Treatment units were observed to have overloaded solids at both treatment plants, more wasting is recommended.* Wasting is conducted three times per year for both plants. However, more frequent measurement and monitoring standards have been implemented. The District is prepared to increase the wasting by

Vactor truck on a more frequent basis based on new measurement/monitoring standard.

- *Treatment units not properly maintained. 10' sludge blanket at GHS Plant due to solid removal inadequacy.* In May 2016, the GHS Plant was struggling with influent being over diluted due to several possible factors such as leaky water faucets and flush valves on toilets not operating properly. The over dilution prevented the natural breakdown of the solids. Since the inspection, necessary repairs have been conducted to decrease the over diluted influent. In addition, staff has been supplementing the plant with 10 lbs of Carmelyx added weekly in the aerating chamber.

3.) Marginal rating: Calibration frequency and records

- Records are maintained of calibration procedures.
- Calibration checks are conducted once a year (in November) by Ted D. Miller Associates, Golden, CO. Records are retained and maintained.

The aforementioned categories and ratings contributed to an Unsatisfactory rating for Effluent/Receiving waters into the Rio Grande. The District has since then taken the measures described above and we are confident that the rating will improve upon subsequent inspections. Please do not hesitate to contact me should you require additional information.

Sincerely,

Jessica S. Herrera
Director of Physical Plant

xc: Sarah Holcomb, NMED Surface Water Quality Bureau
Efren Yturralde, Superintendent
Alfredo C. Holguin, Interim Associate Superintendent for Support Services
Mario Apodaca, Water and Wastewater Treatment Operator